

**Claims:**

What is claimed is:

1. An elastomeric weighted layer 1) comprising an elastomer and a quantity of weighted bodies, and 2) dimensioned to fit under or into conventional headwear, wherein said elastomeric weighted layer weighs between about 100 and about 3,000 grams.
2. The elastomeric weighted layer of claim 1, wherein said weighted bodies are selected from the groups consisting of iron shot, steel shot, and lead shot.
3. The elastomeric weighted layer of claim 1, wherein said elastomeric weighted layer weighs between about 500 and about 2,000 grams.
4. The elastomeric weighted layer of claim 3, wherein said elastomeric weighted layer has a thickness between about 5 and about 10 millimeters.
5. A skullcap having a shape conforming to the crown of the head of a human subject, comprising an elastomeric weighted layer comprised of an elastomer and a quantity of weighted bodies, and weighing between about 100 and about 3,000 grams.
6. The skullcap of claim 5, wherein said elastomeric weighted layer is comprised of a polymeric elastomer, and interspersed therein a quantity of weighted bodies.
7. The skullcap of claim 6, additionally comprising a fabric liner adhered to the inside surface of said elastomeric weighted layer.
8. The skullcap of claim 5, additionally comprising a conventional-style hat or cap having an adaptation to receive as an inner component said skullcap, so as to form a weighted hat or cap.
9. The combined skullcap and hat or cap of claim 8, wherein the adaptation comprises a plurality of spaced sections of hook and loop fabric on the inside of said conventional-style hat or cap, positioned to reversibly adhere to opposingly positioned spaced sections of hook and loop fabric on the outside of said skullcap.
10. A weighted headwear comprising:
  - a. an elastomeric weighted layer comprising an elastomer and a quantity of weighted bodies; and

- b. a conventional hat or cap having a space within it, above a line of fit defined by a user's head, into which fits said elastomeric weighted layer;  
wherein when fit into said space, said elastomeric weighted layer is not visible from a normal field of view of said hat, and wherein said elastomeric weighted layer weighs between about 100 and about 3,000 grams.
- 11. The weighted headwear of claim 10, comprising a conventional hat wherein said space is defined by said line of fit, substantially vertical cylindrical walls of said hat, and a crown portion integral with the top margin of said cylindrical walls, and wherein said elastomeric weighted layer is adapted to conform to the substantially cylindrical shape of the interior of said substantially vertical cylindrical walls.
- 12. The weighted headwear of claim 10, comprising a conventional cap wherein said elastomeric weighted layer is adapted to conform to said line of fit.
- 13. A method of strengthening vertical load-bearing elements of vertebrae of a person in need thereof, said method comprising the steps of said person:
  - a. positioning on said person's head a conventionally-shaped headwear comprising an added mass, wherein such added mass is within the space within said headwear so positioned, wherein the total mass of the structural aspects of the headwear and the added mass is between about 100 and about 3,000 grams; and
  - b. walking for a period of at least/between 20 and 60 minutes with said hat positioned on said person's head.
- 14. The method of claim 13, wherein said added mass is comprised of a skullcap-shaped elastomeric weighted layer comprised of an elastomer and a quantity of weighted bodies.
- 15. The method of claim 14 wherein said headwear is a conventional hat wherein said space is defined by the head of said person, substantially vertical cylindrical walls of said hat, and a crown portion integral with the top margin of said cylindrical walls, and wherein said added mass is comprised of a ribbon-shaped elastomeric weighted layer, longer than tall, adapted to conform to the substantially cylindrical shape of the interior of said substantially vertical cylindrical walls.
- 16. The method of claim 13, wherein said conventionally-shaped headwear is selected from the group consisting of boater; bowler; bucket; cowboy hat; derby; fedora; floppy hat; hamburg;

pillbox; Stetson-styled hat; trilby; baseball cap; beret; cloche; fez; newsboy cap; skullcap; and turban.

17. The method of claim 13, additionally comprising repeating steps a and b for a sufficient period to stabilize or increase the bone mineral density for said person.
18. The method of claim 17, wherein said repeating is conducted until a quantifiable increase in bone mass is obtained.
19. A weight-fillable bladder skullcap comprising
  - a. an inner wall comprising an outer surface conforming to the shape of the crown of the head of a wearer of said skullcap, and an inner surface;
  - b. an outer wall, spaced a distance from said inner wall, comprising an outer surface and an inner surface;
  - c. a plurality of spaced apart junctures communicating between said inner wall and said outer wall;
  - d. a chamber between said inner surface of said inner wall and said inner surface of said outer wall, said chamber closed along a bottom border by a joining of lower edges of said inner wall and said outer wall; and
  - e. a sealable opening accessing said chamber.
20. The weight-fillable bladder skullcap of claim 19, wherein said inner wall and said outer wall are comprised of plastic having a flexibility between about 60 and about 95 durometer units.